SAFETY ALERT…Electrolysis Is Hazardous to Your Health!

A firefighter was seriously injured recently in New York state when a six-inch butterfly valve separated from the driver side pump suction, causing the valve assembly and a 5-inch supply hose to strike and injure the pump operator. During subsequent investigations, five other engines in the same county were found to have significant corrosive damage on the pump side of the supply valve. Although there were several different pumps and manufacturers involved, the common denominator seems to be engines with poly tanks and NO sacrificial anode protection against electrolysis.

You are strongly urged to regularly inspect any couplings involving dissimilar metals for damage from galvanic corrosion (electrolysis) according to NFPA 1964, the 1998 edition, section 4.2.4.

Boise Fire Department reported finding similar corrosion on some of their engines in the past and they have installed sacrificial anodes in the intake housings of their pumps. This appears to have corrected the problem. Some pump manufacturers are now supplying sacrificial suction screens to install in the pump intake housing to correct this electrolysis problem. Contact the manufacturer of the pump in your apparatus for further information.

Additional information about the valve housing failure above can be obtained by contacting Jerry Schroeder, Emergency Services Training, 208-334-3216, or jschroed@pte.state.id.us.